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APPLICATION NO.	FILING D.	ATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,165	07/31/20	003	Wan-Thai Hsu	436-001US	1886
22897	7590 1	1/24/2004	EXAMINER		
DEMONT of	& BREYER, L	WAMSLEY, PATRICK G			
SUITE 250 100 COMMO	ONS WAY	ART UNIT	PAPER NUMBER		
HOLMDEL,	NJ 07733	2819			
			DATE MAILED: 11/24/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/632,165	HSU, WAN-THAI				
	Office Action Summary	Examiner	Art Unit				
		Patrick G. Wamsley	2819				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)	)☐ Responsive to communication(s) filed on						
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b) This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠	4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	)⊠ Claim(s) <u>1-22</u> is/are allowed.						
6)[	Claim(s) is/are rejected.						
	Claim(s) is/are objected to.						
8)[_]	Claim(s) are subject to restriction and/or	r election requirement.					
Applicati	on Papers						
,	The specification is objected to by the Examine						
10)🛛	10)⊠ The drawing(s) filed on <u>31 July 2003</u> is/are: a) accepted or b) objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> </ul>							
	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
•							
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 01/16/2004.  5) Notice of Informal Patent Application (PTO-152)  6) Other:							

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### **DETAILED ACTION**

## **Drawings**

Figures 1 through 3 should be designated by a legend such as --Prior Art--because only that which is old is illustrated [Page 2, lines 1-3]. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: -- Micromechanical Resonator Having Support

Beam Shorter Than One Quarter Wavelength at the Resonant Frequency. --

## Allowable Subject Matter

Claims 1-22 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the references of record neither reveal nor render obvious the recited combination including the use of a resonator support having a length less than one-quarter wavelength of the resonant frequency. U.S. Patent 3,142,027 to Albsmeier et

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al discloses coupling members as "being small as compared with a quarter wavelength" by lacks the structures described for the instant invention.

### Conclusion

This application is in condition for allowance except for the following formal matters:

1) Add a "Prior Art" label to Figures 1, 2, and 3.

2) Adopt a more descriptive title.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 6,169,321 and 5,976,994 to Nguyen et al were cited in the specification of the instant application. U.S. Patent 5,260,658 to Greim et al provides a high-frequency line having a length shorter than one-fourth of a signal wavelength. U.S. Patent 4,382,238 to Makimoto et al uses coaxial cables having lengths shorter than a quarter wavelength. U.S. Patent 4,342,969 to Myers et al describes a microstrip stub having an electrical length less than one-quarter wavelength at the resonant frequency.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick G. Wamsley whose telephone number is (571) 272-1814. The official facsimile number is (703) 872-9306.

Patrick G. Wamsley

November 22, 2004